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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/975,248	10/11/2001	Chakkalamattam Jos Paul	AUS920010248US1	9548

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EXAMINER

YANCHUS III, PAUL B

ART UNIT	PAPER NUMBER
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2116

DATE MAILED: 11/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/975,248	Applicant(s) PAUL ET AL.	
	Examiner Paul B. Yanchus	Art Unit 2116	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-14, 16-23 and 25-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5, 7-9 and 28 is/are allowed.
- 6) ☒ Claim(s) 10-14, 16-23, 25-27, 29 and 30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This final office action is in response to amendments filed on 8/17/05.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10, 16-19, 21-23, 26, 27 and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bizzari, US Patent no. 5,732,268¹.

Regarding claims 10 and 16, Bizzari discloses a method for diagnosing and maintaining remote computing devices the remote computing device coupled to a network and running under a first boot image, the method comprising:

selecting, at a server, a particular remote computing device, wherein a particular remote device is selected from a plurality of remote computing devices ["service technician might be running another program at the time a request is logged" implies that multiple requests may be sent and queued to a technicians computer. Inherently one of the multiple requests is selected to be fulfilled next. column 6, lines 43-59];

downloading a maintenance boot image [slave kernel] to the particular remote computing device via the network [column 7, lines 8-14];

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initiating a first reboot process of the particular remote computing device with the maintenance boot image [column 7, lines 15-20];

performing a diagnostic or maintenance function by running the particular remote computing device under the maintenance boot image [diagnostic programs, column 7, lines 38-40];

monitoring at the server the particular remote computing device for the occurrence of a predetermined event [inherently some monitoring type step must occur to determine when the slave operating system kernel has finished the step accessing and modifying code and data on the first computing device, column 10, lines 1-16]; and

initiating a second reboot process of the particular remote computing device upon the occurrence of a predetermined event associated with the maintenance boot image [attempt to reboot after slave operating system kernel has finished modifying code in the first computer, column 10, lines 1-16].

Bizzari does not specifically disclose that the first computer is rebooted using the first boot image after the operating system kernel has finished the step accessing and modifying code and data on the first computing device. However, it would have been obvious to one of ordinary skill in the art that after the first computer is repaired it would be returned to a state in which normal operations are performed.

Regarding claims 17 and 18, Bizzarri discloses that the diagnostic and repair method may be performed by a human or an automatic software [column 5, lines 21-28].

¹ cited in previous office action

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Regarding claims 19 and 25, Bizzari discloses a computer program product in a computer usable medium for diagnosing and maintaining remote computing devices, the remote computing device coupled to a network and running under a first boot image, the method comprising:

instructions for selecting, at a server, a particular remote computing device, wherein a particular remote device is selected from a plurality of remote computing devices [“service technician might be running another program at the time a request is logged” implies that multiple requests may be sent and queued to a technicians computer. Inherently one of the multiple requests is selected to be fulfilled next. column 6, lines 43-59];

instructions for downloading a maintenance boot image [slave kernel] to the particular remote computing device via the network [column 7, lines 8-14];

instructions for initiating a first reboot process of the particular remote computing device with the maintenance boot image [column 7, lines 15-20];

instructions for performing a diagnostic or maintenance function by running the particular remote computing device under the maintenance boot image [diagnostic programs, column 7, lines 38-40];

instructions for monitoring at the server the particular remote computing device for the occurrence of a predetermined event [inherently some monitoring type step must occur to determine when the slave operating system kernel has finished the step accessing and modifying code and data on the first computing device, column 10, lines 1-16]; and

instructions for initiating a second reboot process of the particular remote computing device upon the occurrence of a predetermined event associated with the maintenance boot

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image [attempt to reboot after slave operating system kernel has finished modifying code in the first computer, column 10, lines 1-16].

Bizzari does not specifically disclose that the first computer is rebooted using the first boot image after the operating system kernel has finished the step accessing and modifying code and data on the first computing device. However, it would have been obvious to one of ordinary skill in the art that after the first computer is repaired it would be returned to a state in which normal operations are performed.

Regarding claims 21 and 22, Bizzarri does not explicitly disclose downloading a particular boot image selected from a plurality of boot images, which perform different tasks. Bizzarri instead discloses downloading a single boot image capable of performing a plurality of tasks. It would have been obvious to one of ordinary skill in the art to modify the Bizzarri system to download a boot image, which performs only a specifically desired task, selected from a plurality of boot images instead of a single boot image which performs a plurality of tasks in order to reduce the size of the boot image and consequently reducing the time required to download the boot image and shortening the downtime of the remote computer device.

Regarding claim 23, Bizzarri does not explicitly disclose storing boot images on a remote storage media. However, storing software on remote storage media is well known in the art and it would have been obvious to one of ordinary skill in the art to use remote storage media to store the boot image.

Regarding claims 26 and 27, Bizzarri discloses that the diagnostic and repair method may be performed by a human or an automatic software [column 5, lines 21-28].

Regarding claims 29-30, Bizzarri discloses an interface on the diagnostic computer that emulates the screen of the particular remote computer device [column 7, lines 25-30]. Therefore, the user at the diagnostic computer is constantly updated to reflect the progress of the diagnostics and repairs.

Claims 11-14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bizzari, US Patent no. 5,732,268², in view of McCall et al., US Patent no. 6,317,826 [McCall].

Regarding claims 11 and 20, Bizzari does not disclose downloading the first boot image to the first computer via the network. However, as shown by McCall, downloading a boot image to a first computer from a network is well known in the art. It would have been obvious to one of ordinary skill in the art to modify the first computer in the Bizzari system to perform a network boot during normal operations by downloading a boot image from the network.

Regarding claims 12 and 13, Bizzarri and McCall do not explicitly disclose downloading a particular boot image selected from a plurality of boot images, which perform different tasks. Bizzarri instead discloses downloading a single boot image capable of performing a plurality of tasks. It would have been obvious to one of ordinary skill in the art to modify the Bizzarri and McCall system to download a boot image, which performs only a specifically desired task, selected from a plurality of boot images instead of a single boot image which performs a plurality of tasks in order to reduce the size of the boot image and consequently reducing the time required to download the boot image and shortening the downtime of the remote computer device.

² cited in previous office action

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Regarding claim 14, Bizzarri and McCall do not explicitly disclose storing boot images on a remote storage media. However, storing software on remote storage media is well known in the art and it would have been obvious to one of ordinary skill in the art to use remote storage media to store the boot image.

Allowable Subject Matter

Claims 1-5, 7-9 and 28 are allowed.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul B. Yanchus whose telephone number is (571) 272-3678.

The examiner can normally be reached on Mon-Thurs 8:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H. Browne can be reached on (571) 272-3670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Paul Yanchus
November 14, 2005


LYNNE H. BROWNE
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